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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,537	10/16/2003	Hyun-kwon Chung	1793.1075	4036

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EXAMINER

PRICE, NATHAN E

ART UNIT PAPER NUMBER

2194

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/686,537	<b>Applicant(s)</b> CHUNG ET AL.	
	<b>Examiner</b> Nathan Price	<b>Art Unit</b> 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2003 and 17 June 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*William Thomson*  
**WILLIAM THOMSON**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/20/2004 and 6/17/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. Claims 1 – 7 are pending.

### *Claim Objections*

2. Claims 1 – 7 are objected to because of the following informalities: the claims include abbreviations ("AV") without a clear indication of the meaning of the abbreviations. Appropriate correction is required.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/686,694. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the copending application anticipates the data storage medium of claim 1.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/685,696. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the copending application anticipates the data storage medium of claim 1.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 10/685,697. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 17 of the copending application anticipates the data storage medium of claim 1.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 9 of copending Application No. 10/685,699. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 9 of the copending application anticipates the data storage medium of claim 1:

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/686,521. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the copending application anticipates the data storage medium of claim 1.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Tsumagari et al. (US 2004/0126095 A1).

9. As to claim 1, Tsumagari et al. (US 2004/0126095 A1) teaches a data storage medium, comprising:

AV data [¶ 27];

a markup document which is provided to reproduce the AV data in an interactive mode [¶ 27]; and

control information which is provided to identify buffering state information of the markup document to be preloaded [¶ 53 and 58].

10. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Tsumagari et al. (US 2003/0161615 A1).

11. As to claim 1, Tsumagari et al. (US 2003/0161615 A1) teaches a data storage medium, comprising:

AV data [¶ 65];

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a markup document which is provided to reproduce the AV data in an interactive mode [¶ 65]; and

control information which is provided to identify buffering state information of the markup document to be preloaded [¶ 255 and 393 – 396].

12. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

13. Claims 1 – 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Lamkin et al. (US 2005/0278729 A1; hereinafter Lamkin). Claims in Lamkin teach claims 1 – 7.

Claim 1 is taught by claim 1 of Lamkin.

Claim 2 is taught by claims 1 – 3 of Lamkin.

Claim 3 is taught by claims 1 and 7 of Lamkin.

Claim 4 is taught by claims 1 and 5 of Lamkin.

Claim 5 is taught by claims 25 and 27 – 29 of Lamkin.

Claim 6 is taught by claims 25 and 27 – 30 of Lamkin.

Claim 7 is taught by claims 1 – 4 of Lamkin.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landsman et al. (US 6,466,967 B2; hereinafter Landsman) in view of Silberschatz (Silberschatz, Avi, Peter Galvin and Greg Gagne, "Applied Operating System Concepts," First Edition, John Wiley & Sons, Inc., 2000.).

15. As to claim 1, Landsman teaches a data storage medium, comprising:

AV data [col. 25 lines 33 – 38; col. 26 lines 1 – 15];

a markup document which is provided to reproduce the AV data in an interactive mode [col. 9 lines 23 – 55; col. 10 lines 5 – 31; col. 26 lines 43 – 49];  
and

control information, which is provided to identify buffering state information of the markup document to be downloaded [col. 34 line 66 – col. 35 line 18].

16. Landsman fails to specifically state that buffering state information is identified by control information. However, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to include control information which is provided to identify buffering state information of the markup document to be preloaded because Landsman teaches that the advertisement can not be played until after it is cached [col. 26 lines 43 – 49], motivating one of ordinary skill in the art to provide a way



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to determine if it is cached. Furthermore, Silberschatz teaches outputting state information of a buffer [page 427 # 6 – 8].

17. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Landsman teaches performing I/O in a computer system and Silberschatz teaches the details of servicing I/O requests.

18. As to claim 2, Landsman teaches the control information includes an API that generates a report signal used to identify a buffering state of the markup document [col. 34 line 66 – col. 35 line 18]. See the rejection of claim 1 for further explanation.

19. As to claim 3, Landsman teaches the control information includes an [obj].isCached(URL, resType) API that generates a report signal, where the URL is a parameter indicating a file path of the markup document and the resType is a parameter indicating an attribute of the markup document [col. 12 lines 15 – 38; col. 26 lines 43 – 49; col. 34 line 66 – col. 35 line 18]. See the rejection of claim 1 for further explanation.

20. As to claim 4, Landsman fails to specifically teach returning a value based on success, failure or incomplete loading. However, Silberschatz teaches returning values depending on the current state, including success, failure and incomplete [page 422 ¶ 3; page 427 # 6 – 8].

21. As to claim 5, Landsman teaches the control information includes an API that generates a fetch signal used to issue a command to preload the markup document [col. 34 line 66 – col. 35 line 18]. See the rejection of claim 1 for further explanation.

22. As to claim 6, Landsman teaches or at least implies that the API returns a response indicating whether the command to preload the markup document has been successfully transmitted using the fetch signal [col. 34 line 66 – col. 35 line 18]. Landsman teaches providing information and control over downloading, such as providing an indication that downloading is being performed or complete, which would indicate a request was successfully transmitted. This would be important because Landsman teaches that advertisements can only play after being fully cached [col. 26 lines 43 – 49].

23. As to claim 7, Landsman teaches the control information includes an API that is used to determine whether preloading of the markup document is completed [col. 34 line 66 – col. 35 line 18]. See the rejection of claim 1 for further explanation.

### ***Conclusion***

24. The prior art made of record on the P.T.O. 892 that has not been relied upon is considered pertinent to applicant's disclosure. Careful consideration of the cited art is required prior to responding to this Office Action, see 37 C.F.R. 1.111(c).

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25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Price whose telephone number is (571) 272-4196. The examiner can normally be reached on 6:30am - 3:00pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NP

  
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